Amendments to the Claims:

Claim 1. (**currently amended**) A method for processing a received signal, the signal being received from a dynamically fading channel, the method comprising ~~the steps of~~:

[handwritten: how there step] detecting ~~the~~ fading characteristics of said fading channel; and

determining a quantization correction command for at least one segment of said received signal. *[handwritten annotations]*

Claim 2. (**currently amended**) The method according to claim 1, further comprising ~~the step of~~ quantizing said at least one segment according to said quantization correction command, ~~thereby producing~~ to produce a quantized signal.

Claim 3. (**currently amended**) The method according to claim 2, further comprising ~~the step of~~ decoding said quantizing signal.

Claim 4. (cancelled)

Claim 5. (**currently amended**) The method according to claim 1, further comprising ~~the step of~~ demodulating said received signal.

Claim 6. (**currently amended**) The method according to ~~step~~ claim 1, wherein ~~said step of~~ detecting the fading characteristics comprises ~~the sub-steps of~~:

estimating ~~the~~ a root-mean-square (RMS) of said received signal; and

computing the minimal and maximum quantities of ~~the~~ samples of said received signal.

3

Claim 7. (**currently amended**) The method according to claim 1, wherein ~~said step of~~ determining the quantization correction command comprises ~~the sub-step of~~ estimating a preferred RMS value.

Claim 8. (**currently amended**) The method according to claim 7, further comprising ~~the step of~~ normalizing said received signal according to said preferred RMS value.

Claim 9. (**currently amended**) The method according to claim 1, wherein ~~said step of~~ detecting the fading characteristics comprises ~~the following sub-steps~~:

estimating ~~the~~ a root-mean-square (RMS) of said received signal, ~~thereby producing~~ to produce an Estimated_RMS value~~,~~; and

estimating channel tap values $\hat{h}[n]$ from said received signal.

Claim 10. (**currently amended**) The method according to claim 9, wherein ~~said step of~~ determining the quantization correction command comprises ~~the following sub-steps~~:

calculating Θ_{MIN} and Θ_{MAX} values, wherein

$$\Theta[n] \equiv \left| Real\{\hat{h}[n]\} \right| + \left| Imag\{\hat{h}[n]\} \right|, \quad \Theta_{MAX} \equiv Max_n\{\Theta[n]\}, \text{ and } \Theta_{MIN} \equiv Min_n\{\Theta[n]\};$$

and

determining a desired_RMS_fade value from said Θ_{MIN}, Θ_{MAX}, and $\Theta[n]$.

Claim 11. (**currently amended**) The method according to claim 9, further comprising ~~the step of~~ normalizing said ~~samples~~ received signal.

Claim 12. (**currently amended**) The method according to claim 11, wherein ~~said step of~~ determining the quantization correction command comprises ~~the following sub-steps~~:

calculating Θ_{MIN} and Θ_{MAX} values, wherein

$$\Theta[n] \equiv \left| Real\{\hat{h}[n]\} \right| + \left| Imag\{\hat{h}[n]\} \right|, \quad \Theta_{MAX} \equiv Max_n\{\Theta[n]\}, \text{ and } \Theta_{MIN} \equiv Min_n\{\Theta[n]\};$$

and

determining a desired_RMS_fade value from said Θ_{MIN}, Θ_{MAX}, and $\Theta[n]$; and

wherein ~~said step of~~ normalizing said samples is performed according to the following expression:

$$\widetilde{Y}[n] = \frac{Desired\_RMS\_Fade}{Estimated\_RMS} \cdot Y[n]$$

wherein $Y[n]$ denotes a pre-quantized value of a selected sample and $\widetilde{Y}[n]$ denotes a normalized pre-quantized value of said selected sample.

Claim 13. (original) The method according to either of claims 10 and 12, wherein said desired_RMS_fade value is determined from said Θ_{MIN}, Θ_{MAX}, and $\Theta[n]$ according to a look-up table having $\Theta_{MAX} - \Theta_{MIN}$ at its input and Desired_RMS_Fade at its output.

Claim 14. (**currently amended**) In a receiver which includes a signal reception unit, a demodulator and a decoder, the receiver receiving a signal from a dynamically fading channel, the demodulator demodulating said received signal thereby producing a demodulated signal, a quantizing device comprising~~;~~:

a channel fading detection unit, ~~connected~~ coupled to said signal reception unit, ~~for detecting~~ to detect ~~the~~ fading characteristics of said dynamically fading channel;

a processor, ~~connected~~ coupled to said channel fading detection unit, ~~for processing~~ to process said fading characteristics, ~~thereby producing~~ so as to produce a correction command for at least one segment of said received signal; and

a quantizing unit, coupled ~~connected~~ to said processor, to said demodulator and to said decoder, ~~for quantizing~~ to quantize said demodulated signal, ~~thereby producing~~ so as to produce a quantized signal; and to correct ~~wherein said quantizing unit also corrects~~ said at least one segment according to said correction command, ~~; and~~

wherein said decoder ~~decodes~~ is to decode said quantized signal.

Page 6

Claims 15 – 17. (cancelled)

Claim 18. (**currently amended**) In a receiver which includes a signal reception unit, a demodulator, a quantizing unit and a decoder, the receiver receiving a signal from a dynamically fading channel, the demodulator demodulating said received signal <u>to produce</u> ~~thereby producing~~ demodulated signal, a fading compensation device comprising;

  a channel fading detection unit, ~~connected~~ <u>coupled</u> to said signal reception unit, ~~for detecting the~~ <u>to detect</u> fading characteristics of said dynamically fading channel;

  a processor, ~~connected~~ <u>coupled</u> to said channel fading detection unit, ~~for processing~~ <u>to process</u> said fading characteristics, ~~thereby producing~~ <u>so as to produce</u> a correction command for at least one segment of said received signal; <u>and</u>

  a correction unit, <u>coupled</u> ~~connected~~ to said processor, <u>to</u> said demodulator and <u>to</u> said quantizing unit, ~~for correcting the~~ <u>to correct a</u> demodulated segment corresponding to said at least one segment according to said correction command, ~~thereby producing~~ <u>so as to produce</u> a corrected segment,

  wherein said correction unit ~~replaces~~ <u>is to replace</u> said demodulated segment with said corrected segment at the input of said quantizing unit.

Claims 19-20. (cancelled)

Claim 21. (**currently amended**) The fading compensation device, according to claim 18, wherein said processor is further ~~connected~~ <u>coupled</u> to said decoder, ~~thereby providing~~ <u>so as to provide</u> said correction command to said decoder ~~for~~ <u>to enable</u> decoding the quantized representation of said corrected segment, with respect to said correction command.

Claim 22. (**currently amended**) A receiver comprising:

6

a signal reception unit, ~~for receiving~~ to receive a signal from a dynamically fading channel;

a demodulator, ~~connected~~ coupled to said signal reception unit, ~~for demodulating~~ to demodulate said received signal, ~~thereby producing~~ to produce a demodulated signal therefrom;

a quantizing processor, ~~connected~~ coupled to said demodulator and to said signal reception unit, ~~for analyzing~~ to analyze said received signal and ~~for quantizing~~ to quantize said demodulated signal, ~~thereby producing~~ to produce a quantized signal; and

a decoder, ~~connected~~ coupled to said quantizing processor, ~~for decoding~~ to decode said quantized signal,

wherein said quantizing processor ~~normalizes~~ is to normalize said demodulated signal according to the estimated fading of said received signal.

Claim 23. (**currently amended**) The receiver according to claim 22, wherein said received signal is a direct sequence — code division multiple access (DS-CDMA) signal and wherein said demodulator is a rake receiver.

Claim 24. (**currently amended**) The receiver according to claim 23, wherein said quantizing processor ~~analyzes~~ is to analyze said received signal by summing ~~the~~ channel taps of selected fingers.

Claim 25. (original) The receiver according to claim 22, wherein said decoder is a Viterbi decoder.

Claims 26 – 27. (cancelled)

Claim 28. (previously added) A method comprising:

quantizing at least one segment of a signal received over a dynamically fading channel according to a quantization correction command determined at least in part from fading characteristics of said channel.

Page 8

Claim 29. (**currently amended**) A receiver comprising:

a channel estimator ~~adapted~~ to detect fading characteristics of a dynamically fading channel; and

a quantizer ~~adapted~~ to quantize at least one segment of a signal received over said dynamically fading channel according to a quantization correction command determined at least in part from said fading characteristics.

Claim 30. (**currently amended**) The receiver of claim 29 further comprising:

a processor coupled to said channel estimator and to said quantizer, said processor ~~adapted~~ to produce said quantization correction command.

Claim 31. (**currently amended**) A receiver comprising:

a quantizer ~~adapted~~ to quantize at least one segment of a received signal according to a quantization correction command; and

a processor ~~adapted~~ to determine said quantization correction command from code properties of a frame of said received signal containing said at least one segment,

wherein at least one frame of said received signal has different code properties than another frame of said received signal.